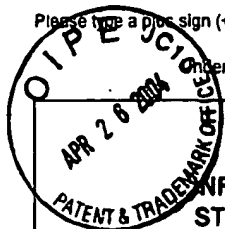


Please type a plus sign (+) inside this box ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



Substitute for Form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/601,866
Filing Date	06/23/2003
First Named Inventor	Anand G. Dabak, et al.
Group Art Unit	2584-2637
Examiner Name	TBD J. COLLIER
Attorney Docket No.	TI-28441A

Sheet

1

of

2

## U.S. PATENT DOCUMENTS

Exam. Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
JK	AA	5,329,547		Ling	07/12/1994	
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					
	AO					

## FOREIGN PATENT DOCUMENTS

Exam. Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
JK	BA		EP 0 767 546 A2		AT&T Corp.	09/04/1997		
N	BB		WO 99/14871		AT&T Wireless Services, Inc.	25/03/1999		
a	BC		WO 99/23766		AT&T Wireless Services, Inc.	14/05/1999		
	BD							
	BE							
	BF							
	BG							
	BH							
	BI							
	BJ							

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box ^



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete If Known</b>			
		Application Number	10/801,866		
		Filing Date	06/23/2003		
		First Named Inventor	Anand G. Dabak, et al.		
		Group Art Unit	<del>2684</del> 2677		
Sheet	2	of	2	Examiner Name	<del>FBD</del> J. Demichis
				Attorney Docket No.	TI-28441A

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Exam. Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
GA	CA	"A Simple Transmit Diversity Technique for Wireless Communications", IEEE Journal on Selected Areas in Communications, IEEE Inc. New York, US, vol. 16, no. 8, October 1998, pp. 1451-1458, XP002100058, ISSN: 0733-8716	
W	CB	"Channel Estimation Using Time Multiplexed Pilot Symbols for Coherent Rake Combining for DS-CDMA Mobile Radio", Personal, Indoor and Mobile Radio Communications, 1997. Waves of the Year 2000. PIMRC '97., The 8th IEEE International Symposium on Helsinki, Finland 1-4 Sept. 1997 New York, NY, USA, IEEE, US 1/09/1997, pp. 954-958, XP010247589, ISBN: 0-7803-3871-5	
M	CC	"New Detection Schemes for Transmit Diversity with no Channel Estimation", Tarokh, V., et al., Universal Personal Communications, 1998. ICUPC '98. IEEE 1998 International conference on Florence, Italy, 5-9 Oct. 1998, New York, NY, USA, IEEE, US 5/10/1998, pp. 917-920, XP010316028, ISBN: 0-7803-6106-1	
	CD		
	CE		
	CF		
	CG		
	CH		
	CI		
	CJ		
	CK		
	CL		
	CM		
	CN		
	CO		
	CP		
	CQ		
	CR		

Examiner Signature	<i>M. Bonicks</i>	Date Considered	6-2-05
--------------------	-------------------	-----------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box ^



Approved for use through 10/31/2002. OMB 0851-0031  
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO  <b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Complete If Known	
				Application Number	TBD
				Filing Date	Herewith
				First Named Inventor	Anand G. Dabak, et al.
				Group Art Unit	TBD 2637
Examiner Name	TBD J. COENIG				
Sheet	1	of	2	Attorney Docket No.	TI-28441A

U.S. PATENT DOCUMENTS						
Exam. Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
GM	AA	60/099,212		Arthur R. Calderbank, et al.	09/04/1998	Provisional Application
Dr	AB	5,228,054		Rueth, et al.	07/13/1993	
h	AC	5,737,327		Ling, et al.	04/07/1998	
W	AD	5,581,580		Lindbom, et al.	12/03/1996	
h	AE	5,912,931		Matsumoto, et al.	06/15/1999	
W	AF	6,137,843		Chennakeshu, et al.	10/24/2000	
W	AG	6,185,258 B1		Alamouti, et al.	02/06/2001	
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					

FOREIGN PATENT DOCUMENTS								
Exam. Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T*
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)				
GM	BA		WO 99/14871		AT&T Wireless Services, Inc.	25/03/1999		
W	BB		WO 00/14921		AT&T Corp.	16/03/2000		
W	BC		WO 99/23766 A2		AT&T Wireless Services, Inc.	14/05/1999		
h	BD		WO 99/23766 A3		AT&T Wireless	14/05/1999		
	BE							
	BF							
	BG							
	BH							
	BI							
	BJ							
	BK							
	BL							

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Please type a plus sign (+) inside this box ^



Approved for use through 10/31/2002. OMB 0651-0031  
 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO  <b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Complete If Known		
			Application Number	TBD	
			Filing Date	Herewith	
			First Named Inventor	Anand G. Dabak, et al.	
			Group Art Unit	TBD 2637	
			Examiner Name	TBD J. Corrieles	
Sheet	2	Of	2	Attorney Docket No.	TI-28441A

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Exam. Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
A	CA	"Report on FPLMTS Radio Transmission Technology Special Group", (round 2 Activity Report). Association of Radio Industries and Business (ARIB), FPLMTS Study Committee, Draft Version E1.1, 01/10/1997, 224 pages	
M	CB	"Proposed Wideband CDMA (W-CDMA)", Association of Radio Industries and Businesses (ARIB), Japan, 01/1997, 213 pages	
	CC		
	CD		
	CE		
	CF		
	CG		
	CH		
	CI		
	CJ		
	CK		
	CL		
	CM		
	CN		
	CO		
	CP		
	CQ		
	CR		

Examiner Signature		Date Considered	6-2-05
--------------------	--	-----------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.